

**British Made Boilers** 

# Ace and Ace High

Wall Mounted Gas Combination Boiler



User Instructions

To be left with user adjacent to gas meter

## GAS SAFETY (INSTALLATION AND USE) REGULATIONS 1996 (AS AMENDED).

It is the law that all gas appliances are installed by a registered person, in accordance with the above regulations. Failure to install appliances correctly could lead to prosecution. It is in your own interest, and that of safety, to ensure that the law is complied with. WARNING: It is essential that the appliance is correctly earthed. An electricity supply of 230V~50Hz is required, fused at 3 Amp. Read these instructions carefully before attempting to operate the appliance. Comply with all applicable warnings. Do not interfere with any sealed components, and use the appliance only in accordance with these instructions.

#### 1 INTRODUCTION

The **Halstead Ace** and **Ace High** are fully automatic, wall mounted, fan assisted balanced flue gas combination boiler for use with natural gas only. The Ace High has a higher domestic hot water heat output and provides a higher flow rate.

The appliance incorporates a microprocessor based, fully modulating gas control system with direct burner ignition.

The Ace High provides both central heating and instantaneous domestic hot water at outputs between 11 kW (37,500 BTU/h) and 30 kW (102,000 BTU/h). The Ace provides both central heating and instantaneous domestic hot water at outputs between 8.8 kW (30,000 Btu/h) and 24.0 kW (82,000 Btu/h).

Heat output is controlled according to demand (in both domestic hot water and central heating mode) by the modulating gas control. The appliance always gives priority to domestic hot water supply.

The appliance incorporates frost protection. However this is not operational when the main switch on the appliance is in the off position or the electrical supply to the appliance is isolated. An electro/mechanical 24hr time clock is fitted as standard.

#### **Gas Consumer Council**

The Gas Consumer Council (GCC) is an independent organisation which protects the interests of gas users. If you need advice, you will find the telephone number in your local directory under 'Gas'.

#### 2 APPLIANCE OPERATION

In the event of a demand for hot water, the appliance will detect water flow and initiate the ignition sequence. The fan (and pump) will start, and the boiler will light.

If the hot water draw off rate is near to the design flow rate, the appliance will run continuously at full output until the tap is either turned off or the flow rate is reduced, in which case the heat supplied will reduce accordingly to maintain a steady temperature.

Hot water is made available almost immediately at the appliance outlet, but the final temperature and time taken for the hot water to reach a tap depends upon the thermostat setting, the rate at which water is drawn off, and the diameter and length of the pipe between the boiler and tap.

When the tap is turned off, the appliance will revert to heating mode if there is a demand for heating, otherwise the burner will be extinguished until the next demand for hot water.

#### 3 BOILER LOGBOOK

Please ensure that you have a Logbook supplied with your appliance. This Logbook should be completed by your

installer(s) to verify that the correct installation and commissioning procedure was followed.

Failure to complete the Logbook may result in difficulties should a problem rise with your appliance during the guarantee period. This Logbook forms part of the industry's Benchmark code of practice for the installation, commissioning and servicing of central heating systems.

All CORGI Registered Installers carry a CORGI ID card and have a registration number. Both should be recorded in your Logbook. You can check your installer is CORGI registered by calling CORGI on 01256 372300

## 4 OPERATING INSTRUCTIONS

- Check that the gas and electricity supplies are ON and that the water isolation valves underneath the appliance are also turned ON
- 2) If heating is required, first turn the main switch to the Heating & Water position and the Heating temperature control to maximum (fully clockwise). Ensure that the clock is set to an **ON** period (see diagram) or set the clock over-ride switch to the **ON** position. Turn up the room thermostat (if fitted). The boiler will run through a series of tests then the burner will light and the three green LEDs Power On, Heating and Burner On will be illuminated.
- 3) Hot water will be supplied as soon as any Domestic Hot Water tap is turned on and the green Hot Water LED will be illuminated. If necessary, adjust the temperature of the hot water using the Hot Water temperature control.

**NOTE:** Priority is always given to Domestic Hot Water supply. If the burner fails to light, ignition lock-out occurs. In the event of ignition lock-out the red safety Lockout LED will be illuminated. To reset the appliance and initiate a further ignition attempt it is necessary to turn the main switch through to the Reset position (spring return to setting).

If the red safety Lockout LED illuminates again after another ignition attempt, another fault may exist. In this case, press the overheat re-set button situated underneath the LHS of the appliance and reset the appliance as detailed above. If the fault persists, consult your installer or service engineer.

#### **TO TURN THE APPLIANCE OFF:** For short or long periods:

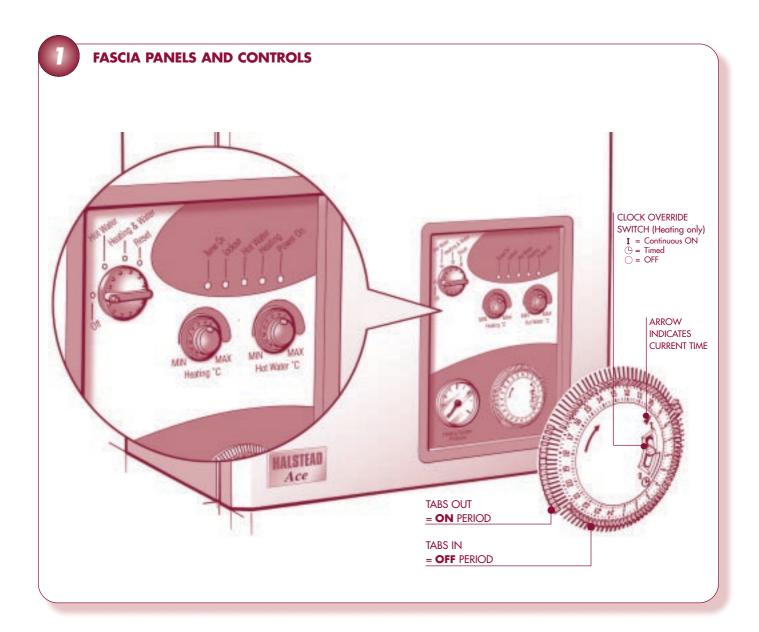
Switch the clock over-ride switch to the **OFF** position.

**Note:** Frost protection is fitted as standard, but this can only function if the gas and electricity supplies are maintained and the main switch on the appliance is left in the hot water or heating and water mode. The clock can be switched to the off setting. If either of these services is to be isolated during a period when frost is likely, the water circuits must be drained.

## CLEARANCES AND VENTILATION

The following minimum clearances must be maintained for installing and servicing the appliance, 200mm top and bottom, 5mm each side and 450mm in front.

If the appliance is installed in a compartment it must not be used for storage purposes. Any ventilation provided for the appliance during installation MUST NOT be blocked and a periodic check must be made to ensure that vents are free from obstructions.



## 6 ROUTINE SERVICING

To ensure continued safe and efficient operation of the appliance it is recommended that it is checked and serviced as necessary at regular intervals. The frequency of servicing will depend upon the particular installation conditions and usage but in general once a year should be adequate. It is the law that any service work MUST be carried out by a registered engineer such as British Gas or CORGI registered personnel.

## ADDITIONAL INFORMATION

## 7.1 IGNITION LOCK-OUT

In the event of an ignition failure, the red safety Lockout LED will be illuminated. Turn the main switch through to the Reset position and release (spring return to setting).

## **7.2** OVERHEAT THERMOSTAT

This appliance is fitted with an overheat thermostat. In the event of overheating, the appliance will shut down and the red safety Lockout LED will light. If an overheat condition occurs allow the appliance to cool, then press the overheat reset button once. It is located underneath the appliance at the left hand side, the ignition

will also require re-setting before the ignition sequence can take place. If this fault condition is repeated, contact your installer or service engineer.

## **7.3** FROST PROTECTION

This appliance is fitted with a frost protection device. In the event of very cold conditions the pump may operate and the boiler may light for a few minutes to protect the appliance and system from potential frost damage. This can only function if the gas and electricity supplies are maintained and the main switch on the appliance is left in the hot water or heating and water mode. The clock can be switched to the off setting.

## **7.4** PRESSURE GAUGE

The pressure gauge on the fascia panel indicates the approximate system pressure. If the normal running pressure is seen to decrease over a period of time there is a water leak. Consult your installer or service engineer.

## **7.5** ELECTRICAL SUPPLY

This appliance requires a 230V~50Hz electrical supply fused at 3A

THIS APPLIANCE MUST BE EARTHED.

#### 3 OTHER FEATURES

The following additional features are included in the appliance specification:

#### **8.1** ANTI-CYCLE DEVICE

When the appliance cycles on it's central heating control setting, a slow cycle device operates. This allows the water to heat up slowly thus preventing rapid cycling of the burners.

## **8.2** ANTI PUMP SEIZURE DEVICE

Providing that a power supply is maintained, The pump will operate for at least 20 seconds every 23 hours (regardless of heat demand) to prevent pump seizure during periods when the appliance is not used.

## 8.3 C.H. WATER FLOW SWITCH

This device prevents the burner from igniting if there is inadequate water flow through the main heat exchanger. If the Power On LED flashes, this indicates failure of the flow switch and your installer or service engineer should be contacted.

#### 9 CLEANING

Use only a damp cloth and mild detergent to clean the appliance outer casing. **DO NOT** use abrasive cleaners.

#### **10** SAFETY

It is essential that these instructions are strictly followed for the safe and economical operation of this appliance.

The appliance is a fan-assisted balanced flue gas boiler and therefore the flue terminal **MUST NOT BE OBSTRUCTED** under any circumstances. If it is damaged, turn off the appliance and consult your installer, service engineer, or BG Service.

If it is known or suspected that a fault exists on the appliance it **MUST NOT** be used until the fault has been rectified by a competent person.



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